Cardo Systems Inc. FCC ID:Q95ER15

RF exposure information according to FCC CFR 47 part 15, §15.247(i), part 2, §2.1093

The transceiver is classified as portable device operating in 2402-2480 MHz band.

It is equipped with an integrated internal antenna and located at the motorcycle helmet at 30 mm distance from the person body.

The threshold power for device operating at 2450 MHz is 57 mW for this separate distance as defined in KDB 447498 D01 v05.

Maximum measured transmitter power ("scala rider Q3", with PA):

Mode of operation	Pout conducted		Maximum antenna gain,	Pout EIRP	
	dBm	mW	dBi	dBm	mW
FHSS	19.03	80	2	21.03	126.8

As written in the Bluetooth standard – CORE 3.0 + HS – the maximum SCO channels that could be activated on a single Bluetooth product is 3.

At Cardo's Qline tested products, only one SCO channel is used—when communicating between headsets. Every SCO channel is 1/3 of time, and on each channel, every unit transmits half of the time, because every channel consists of two participants (voice transfer), every unit is on Tx the 1/6 part of the time, which is 16.66%. So the theoretical maximum duty cycle is 16.66%, effectively, is less, due to Tx to Rx and Rx to Tx transfer time.

Equivalent averaged conducted power is 80 x 0.166 = 13.3 mW.

Equivalent averaged EIRP is 126.8 x 0.166 = 21 mW.

The total transmitter's power is less than 57 mW.

Conclusion: No SAR evaluation is required since the maximum transmitter radiated power is below the FCC threshold.